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Response to OA dated 10/25/05

### REMARKS

Pursuant to the present amendment, claims 4 and 12 have been amended, claims 1-3, 8, and 15-21 have been canceled. Thus, claims 4-7 and 9-14 are pending in the present application. No new matter has been introduced by way of the present amendment. Reconsideration of the present application is respectfully requested in view of the amendments and arguments set forth herein.

Pursuant to the present amendment, claims 1-3 and 16-21 have been canceled as they are directed to a non-elected invention that was the subject of a previous restriction requirement. Applicants specifically reserve the right to pursue the subject matter defined by the canceled claims in a later filed application should they so desire.

In the Office Action, claims 4-7 and 9-15 were rejected under 35 U.S.C. § 102 as allegedly being anticipated by Moore (U.S. Patent No. 6,306,008). Claim 8 was rejected under 35 U.S.C. § 102 as allegedly being anticipated by or, in the alternative, under 35 U.S.C. § 103 as allegedly being obvious over Moore. Applicants respectfully traverse the Examiner's rejections.

Claims 4 and 12, as amended to incorporate features similar to claim 8, include, among other things, estimating a condition of a consumable item (claim 12), such as a pad conditioner (claim 4), and predicting the remaining lifetime of the consumable based on a sensor signal from a conditioner drive assembly of a CMP system.

The Office Action asserts that Moore teaches these features. To the contrary, Moore is completely silent regarding the prediction of the remaining life of the consumable item. Moore detects a degraded condition of a conditioning pad, but fails to look ahead to estimate or predict a remaining life of the conditioning pad. The Office Action admits that Moore fails to teach this

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forward-looking estimation. First, the Office Action asserts that this feature is inherent, and second claims the feature is obvious by taking Official Notice to that effect.

As the Examiner well knows, an anticipating reference by definition must disclose every limitation of the rejected claim in the same relationship to one another as set forth in the claim. *In re Bond*, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990). To the extent the Examiner relies on principles of inherency in making the anticipation rejections in the Office Action, inherency requires that the asserted proposition necessarily flow from the disclosure. *In re Oelrich*, 212 U.S.P.Q. 323, 326 (C.C.P.A. 1981); *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1463-64 (Bd. Pat. App. & Int. 1990); *Ex parte Skinner*, 2 U.S.P.Q.2d 1788, 1789 (Bd. Pat. App. & Int. 1987); *In re King*, 231 U.S.P.Q. 136, 138 (Fed. Cir. 1986). It is not enough that a reference could have, should have, or would have been used as the claimed invention. "The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *Oelrich*, at 326, quoting *Hansgirk v. Kemmer*, 40 U.S.P.Q. 665, 667 (C.C.P.A. 1939); *In re Rijckaert*, 28 U.S.P.Q.2d 1955, 1957 (Fed. Cir. 1993), quoting *Oelrich*, at 326; see also *Skinner*, at 1789. "Inherency ... may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *Skinner*, at 1789, citing *Oelrich*. Where anticipation is found through inherency, the Office's burden of establishing *prima facie* anticipation includes the burden of providing "...some evidence or scientific reasoning to establish the reasonableness of the examiner's belief that the functional limitation is an inherent characteristic of the prior art." *Skinner* at 1789.

Clearly, the feature of predicting a remaining lifetime of the conditioning pad does not necessarily flow from Moore. Moore simply teaches detecting the end of life of the conditioning

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pad. Moore does not teach or suggest predicting the remaining life, and it is not sufficient that Moore could have or should have accomplished this feature to support an anticipation rejection based on inherency.

Moreover, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaack*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991); M.P.E.P. § 2142. Moreover, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974). If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988); M.P.E.P. § 2143.03.

A recent Federal Circuit case makes it crystal clear that, in an obviousness situation, the prior art must disclose each and every element of the claimed invention, and that any motivation to combine or modify the prior art must be based upon a suggestion in the prior art. *In re Lee*, 61 U.S.P.Q.2d 143 (Fed. Cir. 2002). Conclusory statements regarding common knowledge and common sense are insufficient to support a finding of obviousness. *Id.* at 1434-35. It is respectfully submitted that any attempt to assert that the inventions defined by the independent

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claims are obvious in view of the prior art of record constitutes an impermissible use of hindsight using Applicants' disclosure as a roadmap.

Clearly, Moore does not teach all elements of the claimed invention, as admitted in the Office Action by the use of official notice. Moore does not teach or suggest predicting the remaining life on a consumable item.

Official notice unsupported by documentary evidence should only be taken by the examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known. As noted by the court in *In re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970), the notice of facts beyond the record which may be taken by the examiner must be "capable of such instant and unquestionable demonstration as to defy dispute" (citing *In re Knapp Monarch Co.*, 296 F.2d 230, 132 USPQ 6 (CCPA 1961)). (Quoted from MPEP 2144.03(A))

It is certainly not common knowledge capable of instant and unquestionable demonstration that the monitoring pad condition to detect an end of life condition includes predicting remaining life prior to the determination of end of life. Hence, the rejection is improper, and the Office Action fails to establish a *prima facie* case of obviousness.

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For at least the aforementioned reasons, it is respectfully submitted that all pending claims are in condition for immediate allowance. The Examiner is invited to contact the undersigned attorney with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

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